5.12-2
11/25/02

Responses to Comments on the Pre-Final Remedial Design Report and Draft Remedial Action Work Plan (RD/RA WP) for Gypsum Stack Roads

SIMPLOT PLANT AREA EASTERN MICHAUD FLATS SUPERFUND SITE POCATELLO, IDAHO

This document addresses comments received from the U.S. Environmental Protection Agency (EPA) on the above referenced documents. The Idaho Department of Environmental Quality reviewed and is in general agreement with the WP without comment. No comments have been received from the Shoshone-Bannock Tribes. The original comments are shown in italics and are immediately followed by Simplot's response in regular text. Where appropriate, some individual comments have been split up to provide clearer responses.

EPA COMMENTS

GENERAL COMMENTS:

1. *The purpose of the remedial action is to reduce fugitive dust emissions resulting from vehicle traffic on the gypsum stack roads. The Record of Decision (ROD) and Consent Decree (CD) require paving the permanent roads on the face of the gypsum stack.*

It is noted that neither the ROD nor CD requires paving of the permanent gypsum stack roads. Rather, the ROD and CD call for placement of a geofabric and road base barrier or periodic applications of water with or without additives.

Neither the ROD or the CD delineate which roads are defined as permanent roads or distinguish the face of the gypsum stack.

For the purposes of this remedial action, roads that are founded on gypsum will be considered to be on the "face of the gypsum stack". Temporary (non-permanent) roads are defined as roads that receive limited use and will be abandoned within ten years or roads that receive daily use and will be abandoned within four years.

The objective of this action is to reduce emissions from the areas frequently used but not to impose these requirements for areas that won't be useable in the relatively near future.

The objective of these actions, as stated in the CD, is "to reduce visible fugitive emissions generated by vehicular traffic on permanent roads located on the face of the gypsum stack".

For all roads that are considered temporary you must provide the date these roads will be taken out of service. Further, the document must provide detail regarding vehicle traffic patterns, loads, and vehicle count. The document must be revised to include paving all roads frequently used for accessing the gypsum stack and must include the East and West Access Roads.

Section 2.1 of the report has been modified to more clearly identify the permanent roads on the gypsum stack and now includes a figure showing the locations of these roads. In addition, a table has been added to this section that summarizes the details of equipment using the stack area roads (equipment type, trip frequency, approximate weight and ground pressure) and the expected abandonment dates for temporary

roads. As indicated in revised Section 2.1, a road base and geotextile barrier will cover the portion of the East Access Road that is founded on gypsum. All other areas of the East Access Road and the entire West Access Road are founded on native soil and, therefore, are not subject to remedial action.

2. *The document must be revised to provide the design basis and performance standards for the proposed work. The document must be revised to include the criteria for the geotextile selection and rationale for the depth of gravel selected.*

Section 2 has been renamed Design Basis and includes three new sections: 2.3 Gypsum Stack Geotechnical Properties, 2.4 Barrier Thickness Requirements and 2.5 Geotextile Requirements, that present the requested information. The performance standard for the work is presented in Section 1.2.

SPECIFIC COMMENTS:

1. ***Section 2.1, Second Paragraph.*** *This paragraph describes the motor vehicle equipment accessing the Gypsum Stack including maintenance and refueling vehicles, wheeled vehicles, and tracked equipment. However, there is little statistical information provided such as the number of vehicles traveling the road, and the number of trips each vehicle makes on which specific roads over the course of a year. The weights of the vehicles and the overall traffic load are also necessary information to properly evaluate whether the road construction standards are adequate. This information must be provided in order to properly evaluate the adequacy of the proposed road.*

See response to general comment No. 1.

2. ***Section 2.1, Third Paragraph.*** *The document states that the East and West Access Roads were not considered for paving as they are not located on the face of the stack. The document must be revised in accordance with general comment number 2.*

See response to general comment response No. 1.

3. ***Section 3.2.*** *The document does not provide any geotechnical data on the Gypsum Stack material such as its cohesion or bearing capacity. This information is essential in order to properly evaluate road preparation requirements.*

The gypsum stack roads are well compacted by years of use and support the stack equipment loads. Installation of the road base and geotextile barrier will further distribute and lessen equipment loads on the stack materials. Available geotechnical data, including cohesion, and a general assessment of the stack material bearing capacity have been added a new section 2.3 Gypsum Stack Geotechnical Properties.

4. ***Section 3.3.*** *The document does not provide specifications on the geotextile material to be utilized except that it will be non-woven, and will have a minimum weight of eight ounces per square yard. Although it is appropriate to utilize a non-woven material, the geotextile material should have established specifications for grab strength, puncture strength, and burst strength dependent on the road construction needs, the geotechnical data, and the expected traffic load. Furthermore, the geotextile material should be evaluated for performance in cold weather, as these conditions can make some geotextiles brittle and more easily degradeable.*

As indicated in the response to general comment No. 2, a new section 2.5 Geotextile Requirements has

been added to the document that identifies the minimum requirements for grab strength, puncture strength and burst strength. Supporting calculations for these criteria are included as Appendix B. Cold weather criteria were not specified due to a lack of manufacturer's data on cold weather performance. However, the combined cumulative reduction factor (3.4) and factor of safety (2.0) used in establishing the geotextile requirements are expected to provide adequate assurance of cold weather performance. In any event, the barriers will be inspected on a semi-annual basis and repaired as needed (Section 6.0).

5. ***Section 3.3.*** *The proposal to overlap the geotextile material by three feet is not a standard method of connecting geotextiles in road construction. It is a more common and effective practice to join the panels by sewing, stapling, heat welding, tying, and/or gluing. One of these methods should be used in joining the panels for this remedial action to ensure the quality of the road construction base.*

The document has been revised to specify sewing (j-stitch) as the means for joining geotextile rolls.

6. ***Section 3.4.*** *The proposed depth of the road base is six inches. Although, this may be adequate, there is no basis for evaluating this proposed thickness due to the lack of traffic and geotechnical data. The basis for selecting an aggregate base of six inches must be included.*

The rational for selection of a 6-inch road base layer has been added to the document in new section 2.4 Barrier Thickness Requirements.